Investigation of ....

the relationship between them. The equations are used to investigate the particular case of a synchronous generator controlled on the basis of the overall current with the statice reactive-power generator controlled by the overall longitudinal current. It is found that the parameters of the equivalent system differ from the parameters of the controlled synchronous machine and from those of the generator itself (without the static reactive-power generator being connected). Analysis of the small oscillations in the system of Fig. 1 shows that in the absence of stabilizing circuits in the transverse axis of the synchronous generator it is possible to achieve stable operation of the system by introducing a postive damping torque for $I_m[X_d(j\omega)] \leqslant 0$. If the control coefficients of the system are suitably chosen, X_d (see Eq. 5) can be negative so that the threshold power of the system can be increased by m times, where:

Card 5/6

Investigation of ....

$$\frac{x_{11} + x_d}{x_{11} - x_d}$$

which, for large values of x_{11} , can be as high as 3 - 4.5.
There are 5 figures and 4 Soviet-bloc references.
SUBMITTED: April 22, 1961

Fig. 1:

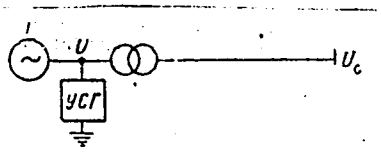
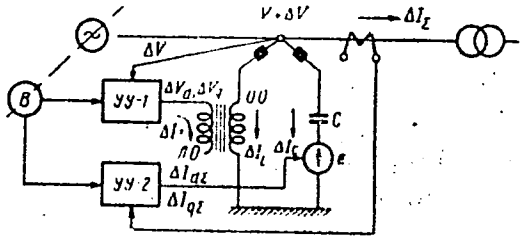


Fig. 2:



Card 6/6

KARPOV, V.A., inzh.

New transcription of equations for electromagnetic processes in synchronous machines with strong automatic excitation control. Izv. vys. ucheb. zav.; energ. 4 no.1:11-17 Ja '61. (MIRA 14:2)

1. Moskovskiy ordena Lenina energeticheskiy institut. Predstavlena kafedroy elektricheskikh sistem.
(Electric machinery, Synchronous)

KARPOV, V.A., inzh.

Manifestation of the existence of stable regions during strong regulation of synchronous machines. Izv. vys. ucheb. zav.; energ 4 no.2:7-10 F '61. (MIRA 14:3)

1. Moskovskiy ordena Lenina energeticheskiy institut. Predstavleno kafedroy elektricheskikh sistem.
(Electric machinery, Synchronous)

L 4226-66 EWT(m)/EPA(w)-2/EWA(m)-2 IJP(c) GS

ACCESSION NR: AT5007956 S/0000/64/000/000/0867/0870

55
B71

AUTHOR: Dzergach, A. I.; Karpov, V. A.

TITLE: Analysis of a system for the regulation of the first revolution which is based on the use of heavy ions

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963. Trudy. Moscow, Atomizdat, 1964, 867-870

TOPIC TAGS: automatic control system, particle accelerator, ion beam

ABSTRACT: A necessary condition for realizing the automatic control of the orbit in the cybernetic accelerator[17] (E. L. Burshteyn, A. A. Vasil'yev, A. L. Mints, V. A. Petukhov, S. M. Rubchinskiy, *Atomnaya energiya*, 12, 111 (1962); *Doklady AN SSSR*, 141, 590 (1961)), is the treatment of the first revolution. A. A. Vasil'yev proposed a system for controlling the first revolution by the use of a beam of heavy ions (*Doklady AN SSSR*, 148, 577 (1963)). An analysis of this sytem is carried out in the present report by the authors. The dependence of the number of correcting magnets and signal electrodes upon the mean-square errors of the magnetic field and installation of the magnets is determined. The authors also discuss various alternatives for rearranging the correcting magnets and the signal elec-

Card 1/2

L 4226-66

ACCESSION NR: AT5007956

4

trodes, and the stability of such a regulation system. The number of control sections necessary for handling the first revolution is calculated from the following differential equation for finding the length of the initial section

$$\frac{d^2c}{d\theta^2}+Q^2c=F(\theta),$$

which describes the smoothed-out motion of a beam of particles. Here, Q--number of betatron oscillations per revolution, and $F(\sigma)$ contains in the form of a linear approximation all the perturbations acting upon the particles as a function of the azimuth σ. Thanks to the large number of magnets in the control section, the deflection of a particle as a function of the azimuth possesses a sinusoidal form with random amplitude and phase which vary slowly in comparison with $\sin Q\sigma$. The authors utilize this fact to determine the structure of the control system according to the sections. It is found that stability can be ensured by employing ordinary stabilizing elements. The described system has not yet been considered for use in the self-correction of the Serpukhov accelerator, but the authors believe that their system is applicable. "The authors thank A. A. Vasil'yev for his constant attention and also Yu. A. Vasina and A. A. Kuz'min for their participation in the discussions." Orig. art. has: 2 figures.

ASSOCIATION: Radiotekhnicheskiy institut AN SSSR (Radio Engineering Institute, AN SSSR)

SUBMITTED: 26May64 ENCL: 00 SUB CODE: NP

NO REF SOV: 002 OTHER: 000

Card 2/2 DP

KAR[illegible] V.A.

Machine for planing longitudinal grooves and drilling holes in bushings. Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekh. inform. 17 no. [illegible] ap '64. (MIR. 17:4)

KARPOV, V.D.

The 1G233 horizontal four-spindle boring machine. Biul. tekh.-ekon. inform. no.3:21-22 '58. (MIRA 11:6)
(Drilling and boring machinery)

KARPOV, V. F.

N/5
671.311
.D8

Bureniye i oborudovaniye melkikh skvazhin dlya vodosnabzheniya (Drilling and equipping small wells for supplying water, by) V. V. Dubrovskiy (1) V. F. Karpov. Moskva, Gosgeolizdat, 1952. 134 p. diagrs., tables.

KARPOV, V.F., inzhener, redaktor; KUNKIN, Ya.A., kandidat tekhnicheskikh nauk, redaktor.

[Mechanical processing of metals; work of the Novo-Kramatorsk Machine-building Plant] Mekhanicheskaia obrabotka metallov; iz opyta NKMZ. Pod. red. V.F.Karpova. Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry [Ukr.otd-nie] 1953. 49 p. (MLRA 7:6)

1. Novo-Kramatorskiy mashinostroitel'nyy zavod.
(Metalwork)

KARPOV, V. F.

USSR/Engineering - Cranes

Card 1/1 Pub. 128 - 7/32

Authors : Koval'skiy, B. S.; Kiselev, N. N.; and Karpov, V. F.

Title : Testing of heavy cranes

Periodical : Vest. mash. 11, 30-32, Nov 1954

Abstract : A description is presented of inspection and static and dynamic testing of cranes with a load lifting capacity of from 10 to 50 tons and 400 to 500 tons. Three USSR references (1949-1952). Drawings.

Institution : ...

Submitted : ...

KARPOV, V. F.

USSR/Engineering

Card 1/1 Pub. 128 - 18/32

Authors : Gel'man, A. S., and Karpov, V. F.

Title : The production of welded cast-structures

Periodical : Vest. mash. 11, 62-66, Nov 1954

Abstract : A description is presented of methods employed by the Stalin Machine Construction Factory in Khramatorsk, in producing welded cast-structures (hydroturbine stators). The overall production of components in 1953, by the above mentioned factory, constituted 5,462 tons. Drawings; tables; diagrams; illustrations.

Institution : ...

Submitted : ...

KARPOV, V.F.

KOROLEV, A.A., kandidat tekhnicheskikh nauk; KOGOS, A.M.; TOKARSKIY, A.P.; NOSAL', V.V. GUREVICH, A.Ye., SHVARTSMAN, V.F.; KARPOV, V.F.; SHUL'MAN, P.G.; ADAMOVICH, N.K.; CHETYRBOK, F.M.; TSELIKOV, A.I., KUZ'MIN, A.D., kandidat tekhnicheskikh nauk; TIKHONOV, A.Ya., tekhnicheskiy redaktor.

[Blooming mill 1000] Bliuming 1000. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1955. 271 p. (MLRA 8:8)

1. Chlen-korrespondent AN SSSR (for TSelikov)
(Rolling mills)

EWT(d)/EWT(m)/EWP(w)/EWA(v)/T/EWP(t)/ETI(k) IJP(c)

ACC NR: AP6006334 SOURCE CODE: UR/0413/66/000/002/0057/0057

AUTHOR: Paton, B. Ye.; Dudko, D. A.; Medovar, B. I.; Lutsyuk-Khudin, V. A.; Savenko, V. Ya.; Kumysh, I. I.; Andrianov, G. G.; Karpov, V. F.; Dovzhenko, N. F.; Antonets, D. P.; Kuzema, I. D.

ORG: none

TITLE: Method of producing composite rolled stock. Class 21, No. 177985 [announced by Electric Welding Institute im. Ye. O. Paton (Institut Elektrosvarki)]

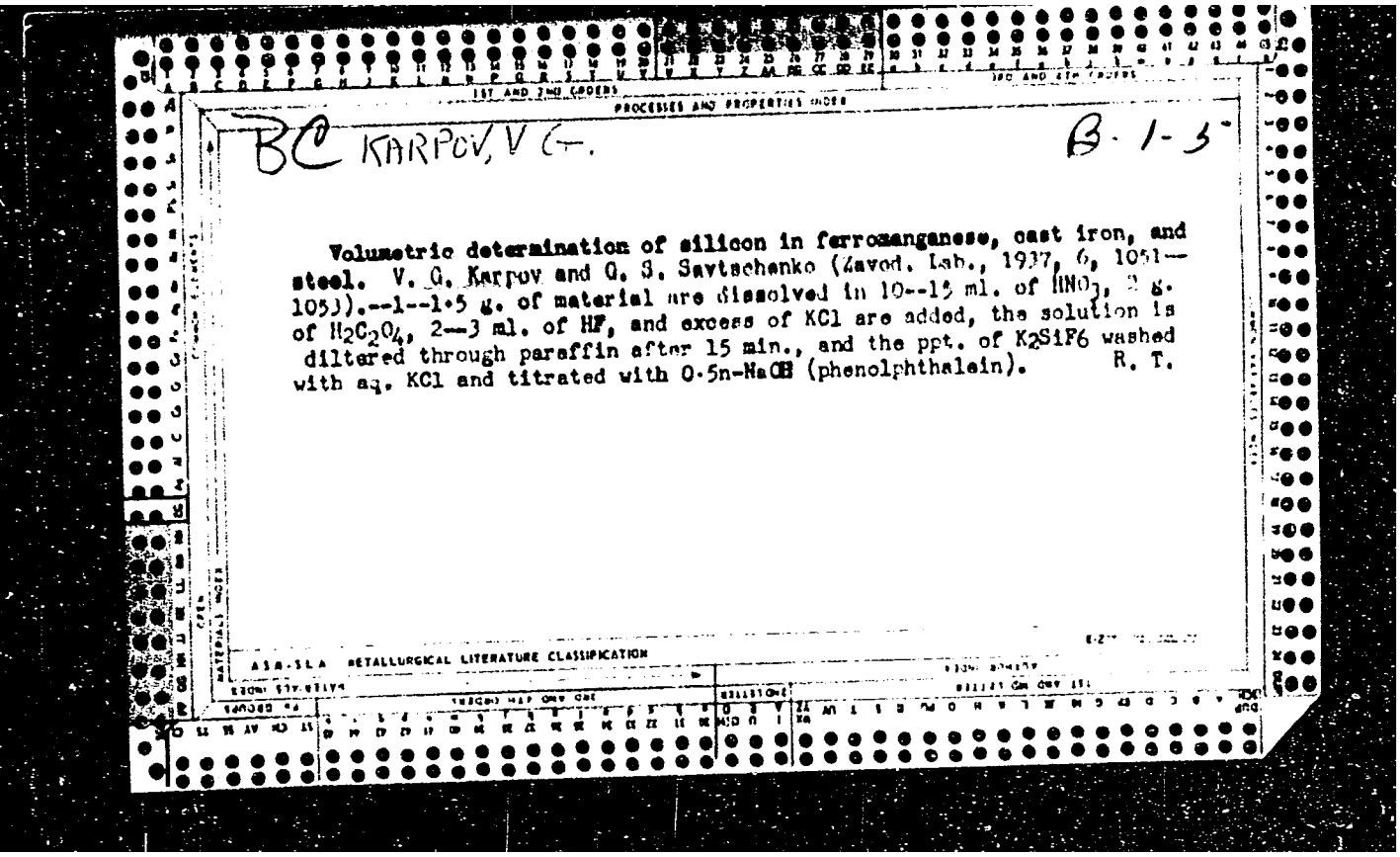
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 57

TOPIC TAGS: welding, metal rolling, sandwich rolling

ABSTRACT: An Author Certificate has been issued for a method of producing composite rolled metal by using a billet consisting of ingots or plates welded together by electroslag welding. To save on stainless steel, lower the thickness of the clad layer, and simplify the welding procedure, it is suggested that the process be begun with a heterogeneous plate made from prewelded and prerolled smaller billets having been a carbon steel and clad layer, and then adding additional ingots or plates to produce sandwich rolled stock. [LD]

SUB CODE: 13/ SUBM DATE: 11Apr63 ORIG: none/ OTH REF: none/

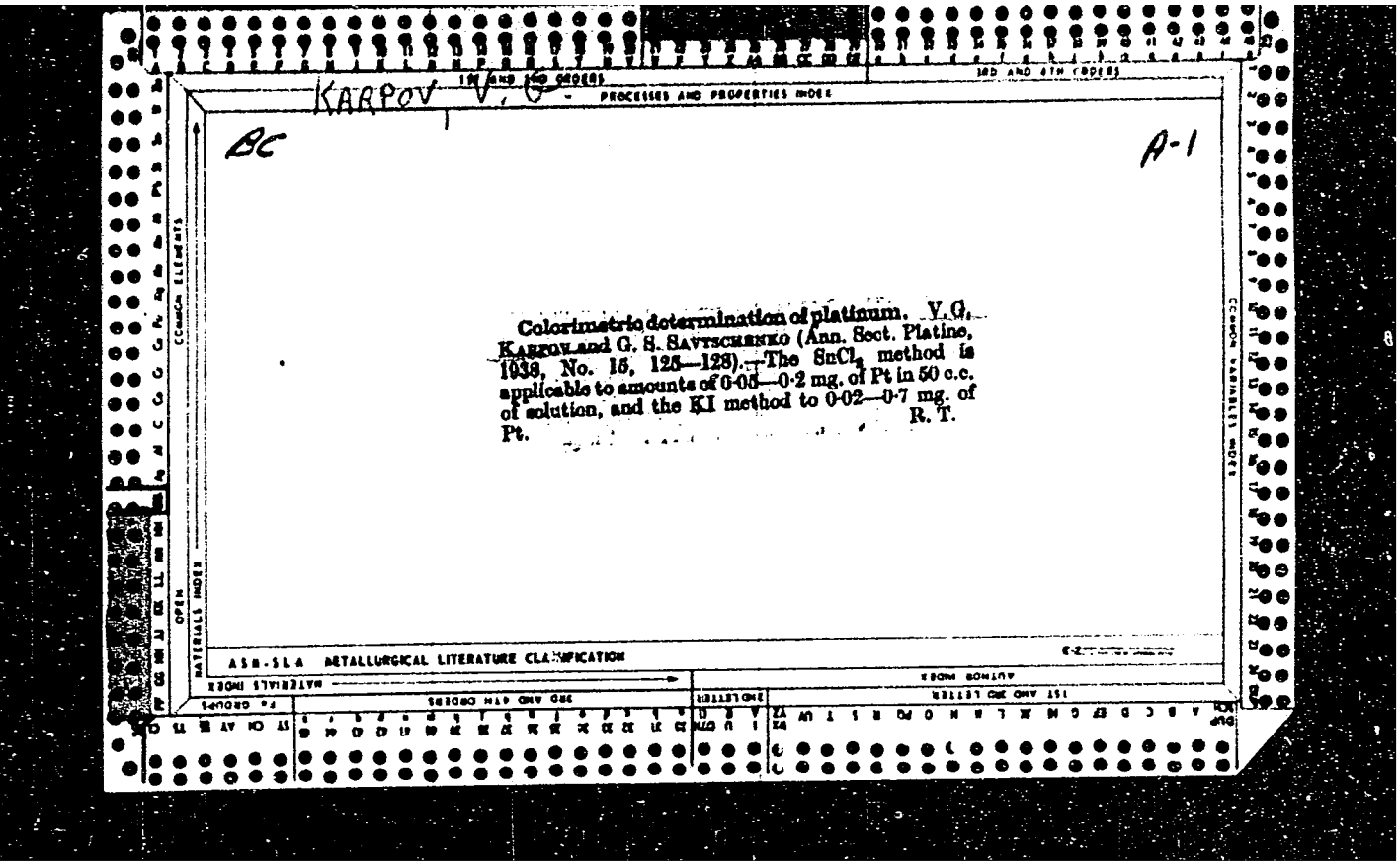
Card 1/1 UDC: 621.791.793:621.771.2-419.5



BC KARPOV, V G. B-1-3

Volumetric determination of silicon in ferromanganese, cast iron, and steel. V. G. Karpov and O. S. Savtschenko (Zavod. Lab., 1937, 6, 1051—1053).--1--1·5 g. of material are dissolved in 10--15 ml. of HNO_3, 2 g. of $H_2C_2O_4$, 2—3 ml. of HF, and excess of KCl are added, the solution is diltered through paraffin after 15 min., and the ppt. of K_2SiF_6 washed with aq. KCl and titrated with 0·5n-NaOH (phenolphthalein). R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



KARPOV V. G.

BC

A-1

Colorimetric determination of platinum. V. G. KARPOV and G. S. SAVTSCHENKO (Ann. Sect. Platine, 1938, No. 15, 125—128).—The $SnCl_2$ method is applicable to amounts of 0·05—0·2 mg. of Pt in 50 c.c. of solution, and the KI method to 0·02—0·7 mg. of Pt.

R. T.

LAPTEV, V.Ye.; KARPOV, V.G.

By-pass devices for low-pressure gate valves. Neft.khoz. 37 no.2:67-68 F '59. (MIRA 12:4)
(Valves)

KARPOV, V.G., podpolkovnik meditsinskoy sluzhby

Using Laskov's apparatus in diagnosing nocturnal enuresis. Voen.-med.zhur. no.12:81-82 '59. (MIRA 14:1)

(URINE—INCONTINENCE)

KARPOV, V.G. (Irkutsk); LEVENTAL', G.B. (Irkutsk); SYROV, Yu.P. (Irkutsk)

Mathematical models of a power system for choosing its optimum structure and modes of operation. Izv. AN SSSR. Energ. i transp. no.4:417-433 Jl-Ag '63. (MIRA 16:11)

KARPOV, V.G.; (Irkutsk); MELENT'YEV, L.A. (Irkutsk)

Principal premises for the creation and development of mathematical modelin methods in power engineering. Izv. AN SSSR. Energ. i transp. no.4:403-409 Jl-Ag '63. (MIRA 16:11)

POPYRIN, L.S., kand. tekhn. nauk; KARPOV, V.G., inzh.; PSHENICHNOV, N.N.; VOYTSEKHOVSKAYA, G.V.

Use of digital computers in the choice of optimum finite parameters of large condensing turbine systems. Teploenergetika 10 no.12:26-33 D '63. (MIRA 17:8)

1. Energeticheskiy institut Sibirskogo otdeleniya AN SSSR.

Name: KARPOV, V.G.
Title: docent

Wrote a dissertation titled, "The Theory of Operation of Multi-Electrode Tubes in Radio Transmitting Equipment, and their Application in Civil Air Fleet Transmitters." Described the theory of operation of multi-electrode tubes including their application in the most diverse circuit arrangements.

REF: R. F. #23-24, p.64, 1938

KARPOV, V.G.

Analysis and synthesis of transients in nonlinear circuits having one energy-consuming element. Nauch.dokl.vys.shkoly; radiotekh. i elektron. no.2:203-214 '58. (MIRA 12:1)

1. Leningradskaya Krasnoznamennaya voyenno-vozdushnaya inzhenernaya akademiya imeni A.F. Mozhayskogo.
(Transients (Electricity))

SVIRIDOV, A.P.; KOREPIN, Ye.A.; BYSTROV, A.I.; KARPOV, V.G.; BARASHKOV, S.K.

Supersound projector equipped with Y-cut quartz piezoelectric cells. Izv.vys.ucheb.zav.; prib. no.1:34-37 '59. (MIRA 12:11)

1. TSentral'naya nauchno-issledovatel'skiaya laboratoriya mestnoy promyshlennosti Lengorispolkoma.
(Ultrasonic waves--Industrial applications)

66323

~~9(2, 4)~~ 9.3220 SOV/162-59-1-23/27

AUTHOR: Karpov, V.G.

TITLE: Steady-State Operating Conditions in a Nonlinear Circuit With One Reactive Element

PERIODICAL: Nauchnyye doklady vysshey shkoly, Radiotekhnika i elektronika, 1959, Nr 1, pp 193-205

ABSTRACT: The author discusses the problem of calculating steady-state operating conditions in a nonlinear circuit with one reactive element. Different approximation methods have been developed, since such calculations are connected with great difficulties. One of these methods, P.A. Ionkin [Ref 1], G.Ye. Pukhov and S.P. Amosova [Ref 2], is based on replacing the actual nonlinear elements by "conditionally nonlinear" elements. This and other methods [Ref 3-5] cannot be used for determining the shape of the oscillations in a circuit, the more, since the higher harmonics were not taken into consideration. None of these methods may be used for a complicated voltage shape. The author investigates the

Card 1/3

Steady-State Operating Conditions in a Nonlinear Circuit With One Reactive Element

approximated solution of this problem for the first harmonic of voltages and currents, based on the quasilinear method. General relationships are derived for calculating the transmission coefficient with a given form of circuit nonlinearity. Based on the author's analysis of transient processes in nonlinear circuit due to a voltage jump [Ref 6], the operating conditions of a circuit are studied on which a periodic voltage of an arbitrary shape is acting. A graphic-analytic calculation method is derived for the steady-state operating conditions during the influence of a harmonic voltage. It is based on the known method of successive intervals used for the approximated solution of nonlinear differential equations. The author presents some examples of using the calculation method suggested. The method may be extended without difficulties to other nonlinear circuits, especially to circuits consisting of active and reactive resistances connected in parallel.

Card 2/3

66323

SOV/162-59-1-23/27

Steady-State Operating Conditions in a Nonlinear Circuit With One Reactive Element

There are 1 set of circuit diagrams, 6 graphs, 5 tables, 6 references, 3 of which are Russian and 3 English.

ASSOCIATION: Leningradskaya Krasnoznamennaya voyenno-vozdushnaya inzhenernaya akademiya imeni A.F. Mozhayskogo (Leningrad Red Banner Academy of Military Aviation Engineering imeni A.F. Mozhayskiy)

SUBMITTED: October 24, 1958

4

Card 3/3

BARASHKOV, Sergey Konstantinovich; BYSTROV, Anatoliy Ivanovich; KARPOV, Vladimir Gavrilovich; KOREPIN, Yevgeniy Andreyevich; SVIRIDOV, Anatoliy Petrovich; MIKHALEV, B.Ye., inzh., red.; FREGER, D.P., red. izd-va; GVIRTS, V.L., tekhn. red.

[Ultrasonic radiator made from barium titanate ceramics for technological applications] Izluchateli ul'trazvuka iz keramiki titanata bariia dlia tekhnologicheskikh primenenii. Leningrad, 1960. 18 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Elektricheskie metody obrabotki materialov, no.1) (MIRA 14:11)

(Ultrasonic waves)

KARPOV, V.G.

Effect of the root competition of trees on the assimilating activity of taiga grasses in spruce forests. Dokl. AN SSSR 140 no.5:1205-1208 O '61. (MIRA 15:2)

1. Laboratoriya lesovedeniya AN SSSR. Predstavleno akademikom V.N.Sukachevym.

(Forest ecology)
(Spruce)

KARPOV, V.G.

Some results of an experimental study on the composition and structure of undergrowth in a whortleberry spruce forest. Probl. bot. 6: 258-276 '62. (MIRA 16:5)

(Forest ecology)

KARPOV, V.G.

Attempt to apply P^{32} to the study of the competition between roots and regrowth of trees in forests of the southern taiga. Dokl. AN SSSR 146 no.3:717-719 S '62. (MIRA 15:10)

1. Predstavlena akademikom V.N.Sukachevym.
(Phosphorus—Isotopes) (Siberia, Eastern—Forest ecology)

KARPOV, V. G.

Experimental study of the mechanism of the successions of forest biogeocenoses in the taiga zone. Dokl. AN SSSR 156 no. 1:203-206 My '64. (MIRA 17:5)

1. Predstavleno akademikom V. N. Sukachevym.

KUZNETSOV, Yu.A.; MAKAROV, A.A.; MELENT'YEV, L.A.; MERENKOV, A.P.; NEKRASOV, A.S.; TSVETKOV, N.I.; KUZNETSOV, Yu.A.; MAKAROVA, A.S.; KARPOV, V.G.; MANSUROV, Yu.V.; SYROV, Yu.P.; KHRILEV, L.S.; TSVETKOVA, L.A.; VOYTSEKHOVSKAYA, G.V.; YEFIMOV, N.T.; LEVENTAL', G.B.; KHANAYEV, V.A.; BELYAYEV, L.S.; GAMM, A.Z.; KARTELEV, B.G.; KRUMM, L.A.; LIOPO, T.N.; SVIRKUNOV, N.N.; DRUZHININ, I.P.; KONOVALENKO, Z.P.; KHAN'YANOVA, N.V.; SHVARTSBERG, A.I.; NIKONOV, A.P.; STARIKOV, L.A.; POPYRIN, L.S.; PSHENICHNOV, N.N.; TROSHINA, G.M.; CHEL'TSOV, M.B.; SVETLOV, K.S.; SUMAROKOV, S.V.; TAKAYSHVILI, M.K.; TOLMACHEVA, N.I.; KHASILEV, V.Ya.; KOSHELEV, A.A.; KUDINOVA, L.I., red.

[Methods for using electronic computers in the optimization of power engineering calculations] Metody primeneniia elektronno-vychislitel'nykh mashin pri optimizatsii energeticheskikh raschetov. Moskva, Nauka, 1964. 316 p. (MIRA 17:11)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Energeticheskiy institut. 2. Chlen-korrespondent AN SSSR (for Melent'yev).

SAVINA, N.A.; KARPOV, V.G., prof., nauchn. red.; VOL'PE, L., red.

[Coupled oscillatory systems; manual for a course on "Theory of radio circuits"] Sviazannye kolebatel'nye sistemy; uchebnoe posobie po kursu "Teoriia radiotekhnicheskikh tsepei." Leningrad, Severo-zapadnyi zaochnyi politekhn. in-t, 1964. 76 p. (MIRA 18:3)

ZERNOV, Nikolay Viktorovich; KARPOV, Veniamin Grigor'yevich; KRYLOV, N.N., retsenzent; KAZARNOVSKIY, D.M., nauchn. red.; PAVLOVA, L.S., red.

[Theory of radio circuits] Teoriia radiotekhnicheskikh tsepei. Moskva, Energiia, 1965. 891 p. (MIRA 18:5)

KARPOV, V.G. (Irkutsk)

Optimization in competitive situations in the solution of power engineering problems. Izv. AN SSSR. Energ. i transp. no.2:43-50 Mr-Ap '65. (MIRA 18:6)

ACC NR: AP7002587 (A, N) SOURCE CODE: UR/0413/66/000/023/0081/0081

INVENTORS: Karpov, V. G.; Lobedev, V. V.; Tayts, D. A.

ORG: none

TITLE: Compensation device for a thermocouple. Class 42, No. 189179 [announced by Special Design Bureau of Semiconductor Devices (Spetsial'noye konstruktorskoye byuro poluprovodnikovykh priborov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 81

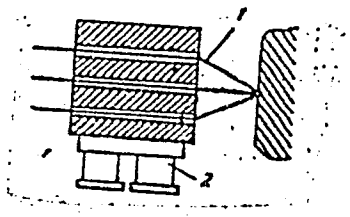
TOPIC TAGS: thermocouple, temperature measuremont

ABSTRACT: This Author Certificate presents a compensation device for a thermocouple, containing an additional thermocouple and a compensation unit for the thermal flux flowing along the thermocouple from the sample. One of the thermoelectrodes of the additional thermocouple is connected to the thermojunction of the thermocouple to be compensated. To reverse the process of cooling and heating of the thermoelectrodes of the measuring thermocouple and to compensate thermal fluxes along this thermocouple in both directions, the compensation unit for the thermal flux is in the form of a semiconductor thermoelement in thermal contact with the thermocouple and connected to a current source (see Fig. 1).

Card 1/2 UDC: 536.532

ACC NR: AP7002587

Fig. 1. 1 - measuring thermocouple;
2 - thermoelement



Orig. art. has: 1 diagram.

SUB CODE: 13, 14/ SUBM DATE: 25Jan65

Card 2/2

KARPOV, V.G.

Dies for bending clips. Avt. prom. 31 no.4:42-43 Ap '65.
(MIRA 18:5)

1. Yaroslavskiy motornyy zavod.

KARPOV, V.G.

Forest vegetation of the foothills of the Labinskaya-Teberda area in the northwestern Caucasus. Geobotanika Ser. 3 no.8:241-258 '52. (MLRA 6:6)

1. Botanicheskiy institut imeni V.L. Komarova akademii nauk SSSR.
(Caucasus, Northwestern--Botany)

KARPOV, V.G.

Ecology of growth of woody plants in desert-steppe zone. Bot. Zhur. 37, No.5, 594-609. '52. (MLRA 5:10)
(Biol.A 28 no.2:2800 '54)

KARPOV, V.G.

Competition between trees and undergrowth in dry steppe plantation. Bot.zhur.40 no.3:376-401 My-Je '55. (MLRA 8:10)

1. Institut lesa Akademii nauk SSSR, Moskva.
(Forest ecology)

KARPOV, V.G.

Root competition of stands and plantings on arid steppes. Dokl.AN SSSR 104 no.3:487-490 S '55. (MLRA 9:2)
(Viazovka District, Balashov Province--Forests and forestry)
(Botany--Ecology)

KARPOV, V.G.

Some physiological characteristics of oak seedlings grown under conditions of root competition. Bot.zhur. 41 no.9: 1263-1272 S '56. (MLRA 9:11)

1. Institut lesa Akademii nauk SSSR, Moskva.
(Oak) (Plants--Transpiration) (Roots (Botany))

AUTHOR: Karpov, V. G.,

20-119-2-52/60

TITLE: The Root Competition of a Stand and the Structure of the Herbaceous and Dwarf Shrub Stage in the Tayga Forest (Konkurentsiya korney drevostoya i stroyeniye travyano--kustarnichkovogo yarusa v tayezhnykh lesakh)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol 119, Nr 2, pp 375 - 378 (USSR)

ABSTRACT: The interaction of the plants in the phytocoenosis are investigated as one of the most important problems in geobotany. It can mainly be solved by way of experiments. However, the problem mentioned in the title so far is only insufficiently investigated. In the present paper the author confines himself to the forest type Picetum myrtillosum (red fir with blueberry) in the Vologda district. The general conditions of the investigated, 115 year old forest are described. The low perviousness to water of the carbonate-clay soil effects a seasonal over-moisture and therefore unfavorable airing conditions. Therefore the zone occupied by roots is very narrow: 90% of the roots of trees, herbs and dwarf shrubs are confined to the

Card 1/4

The Root Competition of a Stand and the Structure of the Herbaceous and Dwarf Shrub Stage in the Tayga Forest

zone of forest litter. The stage of herbs and dwarf shrubs is very irregular as to composition and structure. Larger stocks of the blueberry (Vaccinium myrtillum) are scattered over an undergrowth of Oxalis, Majanthemum bifolium and Trientalis europaea. These plants do not cover the soil by more than 10-15%. The moss cover is relatively well developed and covers 50-55% of the soil (green mosses). The experiment scheme was: 1st and 3rd control lot: a) without destruction of the natural structure, b) removal of all non-treelike plants; 2) experiment lots: c) isolated from the influence of the roots of the trees by 50 cm deep trenchings, d) as c, but additionally denuded of small plants. The results obtained mainly give evidence of the fact that the roots of trees in coniferous forests highly impede the development of small plants in the shadow of the forest. By eliminating the influence of the roots of the trees the small plants became denser and covered the soil much more intensely. Mainly Oxalis grew exuberantly and suppressed

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000720830011-9"

The Root Competition of a Stand and the Structure of the Herbaceous and Dwarf Shrub Stage in the Tayga Forest

Majanthemum and Trientalis. The small plants also produced larger annual growths and leaves (table 2). The leaves became darker. The plants began vegetation earlier reached the stage of blossoming and bearing fruit earlier, and turned yellow much later in autumn. (by 1 - 1.5 months). Also the number of generative shoots was higher than in the control. Moss was repressed by the herbaceous plants and entirely disappeared in the 3rd year. Thus the roots of trees favour the thriving of mosses (Reference 4). New kinds of plants appear which are extraneous to closed stands of red fir: raspberry (Rubus idaeus), Chamaenerium angustifolium and Epilobium montanum. It was not the lack of light which had earlier hindered these 3 plants from colonizing the forest, but the taking away of the elements of mineral food by the roots of the trees. Scarcity of water could not be ascertained. In this coniferous forest it rained frequently and abundantly in the summer. Table 3 shows the content of movable nitrogen forms. It was much higher in the lots

The Root Competition of a Stand and the Structure of the Herbaceous and Dwarf Shrub Stage in the Tayga Forest

with elimited roots of trees (2-to 3-fold). The 3 kinds of plants mentioned last are known as indicators of rich soils especially such with raised content of nitrogen. Their appearance in the lots with the roots of trees taken away can be regarded as one of the most important proofs of a considerable improvement of the mineral nutrition. There are 3 tables and 7 references, 4 of which are Soviet.

ASSOCIATION: Institut lesa Akademii nauk SSSR (Forest Institute of the AS USSR)

PRESENTED: December 4, 1957, by V. N. Sukachev, Member, Academy of Sciences, USSR

SUBMITTED: December 3, 1957

17(1)

AUTHOR: Karpov, V. G.

SOV/20-125-6-53/61

TITLE: Competition for Nutrients and Regeneration Processes in the Plantations of the Steppe Zone (Konkurentsiya za pitatel'nyye veshchestva i vozobnovitel'nyye protsessy v nasazhdeniyakh stepnoy zony)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 6, pp 1363-1366 (USSR)

ABSTRACT: By an elimination of the action of roots of mature trees the growth and condition of young trees underneath the crowns is considerably improved (Ref 6). As, in this process, there was always an improvement in the moisture supply of the young trees, it was concluded that an extremely keen competition for water is the main factor that restricts the development of new generations of steppe forests (Ref 7). However, the mechanism of action of the roots of mature trees upon the undergrowth is far more complicated. Various circumstances (Refs 1,4,5,11-13) led to the conclusion that the competition between the young and the mature trees in the steppe forests is insignificant for forest regeneration. There is, however, a lack of pertinent observations. In 1957 the author studied said influence on the mineral

Card 1/4

nutrition of seedlings in the grain sovkhoz "Belyye Prudy" area of Balashov. Around 6-year-old oaks the roots of the older trees (45 years) were chopped off to a depth of 1 m. From table 1 it may be seen that, during the years 1950-1957, there was a marked lowering of the total nitrogen content in the mineral soil strata isolated from the action of the roots of older trees. This phenomenon may be connected with an increase in the intensity of the mineralization of organic matter. With improved moisture supply these processes are considerably accelerated. Thus the nutrients are mobilized more easily if and when soil desiccation by the roots of older trees has been eliminated or at least reduced. In the topmost soil strata (to a depth of 20-30 cm) there is a comparatively slight but noticeable decrease in the content of mobile nitrogen- and potassium forms, over the area covered on the whole by the roots of the seedlings. The content of mobile phosphorus forms remains practically unaffected by the removal of the roots of older trees. Despite the more favorable conditions provided for the seedlings in the test lots, a development with satisfactory nutrient supply could also be observed in the young trees in the control lots

(together with roots of older trees). The author is of the opinion that a direct determination of the nutriants in the soil is entirely insufficient for a judgement of the influence exerted by the roots of older trees on the seedling nutrition. For this purpose, the plants of the test- and control lots themselves would have to be analyzed (Table 2). Therefrom it may be seen that, after the elimination of the competition of older plants, the total nitrogen content in the stems and leaves increases, but by a comparatively small value. A most surprising phenomenon was the phosphorus accumulation in the foliage of control seedlings (higher by 20 and 50% than that in the test lots). There is a most marked correlation between the repression degree of oak seedlings and their N - and P contents. The improved P supply of seedlings growing in keen competition with the roots of older trees is paradoxical. The author confirms the current opinion that the poor growth of steppe seedlings is, after all, caused by water deprivation effected by the roots of older trees. There are 2 tables and 15 references, 13 of which are Soviet.

Competition for Nutrients and Regeneration Processes in the Plantations of the Steppe Zone SOV/20-125-6-53/61

ASSOCIATION: Institut lesa Akademii nauk SSSR (Forestry Institute of the Academy of Sciences USSR)

PRESENTED: December 17, 1958, by V. N. Sukachev, Academician

SUBMITTED: December 16, 1958

Card 4/4

GERMAN-PROZOROVA, Lyutsiya Pavlovna; VINOGRADOVA, Nina Ivanovna; KREYTSER, V.L., prof., doktor tekhn.nauk, red.; GOS, M.E., kand.tekhn. nauk, red.; KARPOV,V.G., kand.tekhn.nauk, red.; LEVIT, A.B., inzh., red.; MALAKHOV, I.K., inzh., red.; LEPESHINSKAYA, Ye.V., red.; BRUDNO, K.F., tekhn.red.

[English-Russian radio engineering dictionary] Anglo-russkii radiotekhnicheskii slovar'. Pod obshchei red. V.L.Kreitsera. Red. kollegiia: M.E.Gos i dr. Moskva, Glav.red.inostr.nauchno-tekhn. slovarei, 1960. 524 p. (MIRA 13:7)
(Radio--Dictionaries)
(English language--Dictionaries--Russian language)

KARPOV, V.G.

Principal results of experimental research on plant interrelationships in forests of the middle taiga zone. Report No.1. Bot.zhur. 45 no.2:161-180 F '60. (MIRA 13:6)

(Vologda Province--Forest ecology)

RYSIN, L.P.; KARPOV, V.G.

Conference on problems pertaining to the investigation of hardwood forests of the forest-steppe zone at permanent field stations. Bot. zhur. 46 no. 5:747-750 My '61. (MIRA 14:7)

1. Laboratoriya lesovedeniya AN SSSR, Moskva.
(Forestry research)

KARPOV, V.G.

Phenomena of succession reversion and their significance for the solution of some problems concerning the dynamics of the forest cover in the taiga zone. Dokl. AN SSSR 139 no.5:1242-1245 Ag '61. (MIRA 14:8)

1. Laboratoriya lesovedeniya AN SSSR. Predstavleno akademikom V.N. Sukachevym.
(Forest ecology)

REMEZOV, N.P. [deceased]; RODIN, L.Ye.; BAZILEVICH, N.I.; Prinimali uchastiye: ALEKSANDROVA, V.D.; BORISOVA, I.V.; BYKOVA, L.N.; ZONNA, S.V.; KARPOVA, V.G.; MINA, V.N.; NECHAYEVA, N.T.; PONYATOVSKAYA, V.M.; REMEZOVA, G.L.; SAMOYLOVA, Ye.M.; SMIRNOVA, K.M.; SUKHOVERKO, R.V.

Methodological instructions for studying the biological cycle of ash substances and nitrogen of terrestrial plant communities in the main natural zones of the temperate zone. Bot. zhur. 48 no.6:869-877 Je '63. (MIRA 17:1)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR, Leningrad i Pochvennyy institut imeni V.V. Dokuchayeva Ministerstva sel'skogo khozyaystva SSSR, Moskva.

SUKACHEV, V.N., akademik; MOLCHANOV, A.A.; DYLIS, N.V., doktor biol. nauk; TSEL'NIKER, Yu.L.; KARPOV, V.G.; RAFES, P.M.; DINESMAN, L.G.; PEREL', T.S.; YEGOROVA, S.A.; YENIKEYEVA, M.G.; BOL'SHAKOVA, V.S.; ZONN, S.V.; ALEKSANDROVA, V.D.; LEBEDEV, D.V., red.

[Fundamentals of forest biogeocenology] Osnovy lesnoi biogeotsenologii. Moskva, Nauka, 1964. 573 p. (MIRA 18:2)

1. Akademiya nauk SSSR. Laboratoriya lesovedeniya.

KARPOV, V.G.

Recent experimental data on the mechanism of the succession of forest plant communities in the taiga zone. Bot. zhur. 49 no.8: 1101-1118 Ag '64. (MIRA 17:11)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

BARMASH, A.I., kand.tekhn.nauk; BARSUKOVA, A.P., mladshiy nauchnyy sotrudnik; GUSAKOVSKIY, Z.P., inzh.,red.; OCHKIN, V.A., inzh., red.; GORBATOV, V.M., red.; SINITSYN, K.D., red.; LAVROVA, L.P., red.; SHIPOV, V.P., red.; KARPOV, V.I., red.; RUMYANTSEVA, Ye.P., tekhn. red.

[Technological instructions for the production of meat and meat products] Tekhnologicheskie instruktsii po proizvodstvu miasa i miasnykh produktov. Moskva, 1962. Sec. 11.[Canned meat] Konservy. 1962. 641 p. (MIRA 16:6)

1. Moscow. Vsesoyuznyi nauchno-issledovatel'skiy institut myasnoy promyshlennosti. 2. Sotrudniki Vsesoyuznogo nauchno-issledovatel'skogo instituta myasnoy promyshlennosti (for Barmash, Barsukova).
(Meat, Canned)

KARTOV, V. I.

Afforestation- Saratov (Province)

Correct spot seeding of oak. Les i step 4, No. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1952. 1953, Uncl.

KARPOV, V.I.

SHEMYAKIN, M.M.; MAYMIND, V.I.; TOKAREV, B.V.; KARPOV, V.I.

Study of Stephen reaction. Zhur.ob. khim. 28 no.4:978-983 Ap '58.
(MIRA 11:5)

1. Institut biologicheskoy i meditsinskoy khimii Akademii meditsinskikh nauk SSSR.

(Aldehydes)

KOYFMAN, Mikhail Il'ich; IL'NITSKAYA, Yelena Ivanovna; KARPOV, Viktor Ivanovich; PROTOD'YAKONOV, M.M., prof., doktor tekhn. nauk, otv. red.; TEDER, R.I., otv. red.

[Resistance of rocks in a volume stressed state; some problems in the methodology of research] Prochnost' gornykh porod v ob"emnom napriazhennom sostoianii; nekotorye voprosy metodiki issledovanii. Moskva, Nauka, 1964. 32 p. (MIRA 17:11)

VOBLIKOV, V.S., kand.tekhn.nauk; KUDRYA, N.A., inzh.; KARPOV, V.I., inzh.

Apparatus for measuring linear deformation of rocks in uniaxial compressibility tests. Nauch.soob.Inst.gor.dela 7:111-113 '61. (MIRA 15:1)

(Rocks--Testing)

KARPOV, V.I.

Determining the hardness and abrasion of rocks in rotary drilling.
Fiz.-mekh.svois.,dav.i razr.gor.porod no.1:12-16 '62. (MIRA 16:3)
(Rocks--Testing)

LANIS, Viktor Anatol'yevich; LEVINA, Lyubov' Yefimovna. Prinimali uchastiye: KARPOV, V.I.; TAMARKIN, M.Z.; ALASHKEVICH, M.L.; MENSHIKOV, M.I., red.; LARIONOV, G.Ye., tekhn. red.

[Technology of vacuum testing] Tekhnika vakuumnykh ispytanii. Pod obshchei red. M.I.Men'shikova. Moskva, Gosenergoizdat, 1963. 262 p. (MIRA 16:7)
(Vacuum technology) (Nondestructive testing)

KARPOV, Vsevolod Ivanovich; OBUKHOV, S.G., red.; LARIONOV, G.Ye., tekhn. red.

[Transistor voltage regulators] Poluprovodnikovye stabilizatory napriazheniia. Moskva, Gosenergoizdat, 1963. 111 p. (Biblioteka po avtomatike, no.89) (MIRA 17:4)

KARPOV, V.I.

LARIONOV, G.N., inzh.; LESHCHENKO, A.F., inzh.; D'YACHENKO, A.Z., inzh.; PRISHCHEPA, M.P., dots.; KARPOV, V.I., dots.; KOLESNIKOV, A.F., dots.; SAFRONOVA, M.I., assistent; MIRONOV, I.L., assistent; SEMESHKO, P.T., inzh.

Improve the quality of cast frog cores made of high-manganese steel. Put' i put. khoz. no. 8:24-25 Ag '58. (MIRA 11:8)

1. Novosibirskiy strelochnyy zavod (for Larionov, Leshchenko, D'Yachenko). 2. Tomskiy elektromekhanicheskiy institut inzhenerov transporta (for Prishchepa, Karpov, Kolesnikov, Safronova, Mironov). 3. Zamestitel' nachal'nika Tomskoy dorogi (for Semeshko).
(Railroads--Switches)
(Metal castings)

5(4)
AUTHORS: Prishchepa, M. P., Karpov, V. I., Kolesnikov, A. F. SOV/32-24-12-35/45

TITLE: Machine for Testing Metals for Wearing During Frictional Impact (Mashina dlya ispytaniya metallov na iznos treniyem s udarom)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 12, pp 1512 - 1512 (USSR)

ABSTRACT: For the machine described here the authors obtained patent Nr 112452. The previously known machines for testing frictional wearing with simultaneous dynamic loading do not reproduce the application conditions for the details tested. The machine described here comes very close to reproducing the working conditions of the building elements in railroad rails. The machine (Fig 1) consists of a driving part and a driven part. The former is a pair of wheels turned by the driving belt from an electric motor. One of the wheel rims is carefully ground and serves as a friction surface. The driven section is a disk (thickness 30 mm, diameter 200 mm)

Card 1/2

Machine for Testing Metals for Wearing During Frictional Impact SOV/32-24-12-35/45

of hardened ShKh15 steel which can turn freely on a ball bearing. The disk is turned by the turning, polished wheel located on a weighted lever. The sample is placed in a groove in the disk rim and is thus exposed to the friction. In order that the sample will be prominent, a jump or impact is produced while the wheele is turning which depends upon the extent to which the lever is weighted and the distance which the sample protrudes out of the disk. Several kinds of steel with varying structures (st.5, 40Kh, G13L) (Fig 2) were investigated. There are 2 figures.

ASSOCIATION: Tomskiy elektromekhanicheskiy institut inzhenerov zheleznodorozhnogo transporta (Tomsk Electromechanical Institute of Railway Transportation Engineers)

Card 2/2

S/129/60/000/04/014/020
E073/E535

AUTHORS: Prishchepa, M.P., Candidate of Technical Sciences, Karpov, V. I., Candidate of Phys-Mat. Sciences, and Kolesnikov, A. F.

TITLE: Change in the Properties of the Steel G13L During Tempering

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, 1960, No 4, pp 53-54 (USSR)

ABSTRACT: The authors investigated the influence of the tempering regime of the high manganese G13L steel on changes in some of its properties. The Works A produced this steel in electric furnaces, whilst the Works B produced it in open hearth furnaces. The compositions were as follows:
A - 1.36% C, 14.27% Mn, 0.72% Si, 0.080% P, 0.013% S;
B - 1.27% C, 12.40% Mn, 0.65% Si, 0.071% P, 0.018% S.
A magnetic method of investigation was used, which was described in a paper by P. M. Yelchin (Ref 1). The obtained results are entered in the graphs, Figs 1 and 2 and these show that heating up to 415°C does not bring

Card 1/2

S/129/60/000/04/014/020
E073/E535

Change in the Properties of the Steel G13L During Tempering

about any appreciable change in the properties.
There are 2 figures, 1 table and 1 Soviet reference.

ASSOCIATION: Tomskiy elektromekhanicheskiy institut inzhenerov zheleznodorozhnogo transporta (Tomsk Electromechanical Institute of Railways Transportation Engineers)

Card 2/2

KARPOV, V.I.; KOLESNIKOV, A.F.; NIKITINA, A.K.; PRISHCHEPA, M.P.

Impact toughness of G13L steel at low temperatures. Metalloved. i term. obr. met. no.7:39-40 Jl '64.

1. Omskiy institut inzhenerov zheleznodorozhnogo transporta.

L 3600-66

ACCESSION NR: AP5024047 UR/0057/65/035/009/1662/1665
621.521

AUTHOR: Karpov, V. I.; Levina, L. Ye.; Murav'yeva L. D. 40 B

TITLE: Some results of a mass spectrometric investigation of the operating mechanism of a halide leak detector

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 9, 1965, 1662-1665

TOPIC TAGS: surface ionization, platinum, alkali metal, halide, vacuum technique, ceramic material

ABSTRACT: The authors are interested in the operation of halide leak detectors of the type that were originally intended for testing freon refrigerators and are based in the increased emission of ions by certain metals in the presence of halides, discovered in 1944 by Rice (U.S.A.Patent No. 2550498). A 2 x 20 mm slot was cut in the 7 mm diameter platinum cylindrical collector of a leak detector so that the collected ions could be analyzed with a mass spectrometer. The emitter was a helix of 0.2 mm diameter platinum wire wound on a 5 mm diameter ceramic tube mounted within and coaxial with the collector. Air (to which halides could be added) was kept flowing through this device at a constant rate and at a pressure of (1.5-2) x 10^{-5} mm Hg. It was found that the ion current was due almost entirely to alkali

Card 1/3

metal ions, both in the presence and absence of halides. When halides (freon, CCl_4, or Cl_2) were added to the air stream, the currents of the different alkali metal ions increased by approximately the same factor. The ion emmissions of the ceramic tube and the platinum wire were examined separately. The ceramic tube was heated from within by a tungsten filament; the platinum wire was supported without the ceramic tube in a manner that is not adequately described. It was found that both the ceramic tube and the platinum wire emit alkali metal ions; the emission from the ceramic tube was weak and was not halide sensitive. The emission from the reassembled emitter was much greater than the sum of the emissions from the two separate components. It is concluded that alkali metal atoms are evaporated from the ceramic tube and are ionized on the platinum surface, and that it is the surface ionization that is halide sensitive. The leak detector emitters become depleted after prolonged use. It was found that a depleted emitter can be restored by boiling the ceramic tube in aqueous KOH solution and heating the reassembled emitter in air for several hours. The results obtained in activating emitters are in good agreement with data of Udo Henning (Wiss. Zs. Martin-Luter Univ., Halle-Wittenburg, Math. naturwiss. Reihe, 10, No.5, 931-940, 1961) and Wienecke and Rackwitz (Nachrichtentechnik, 8, No.5, 209, 1958). Orig. art. has: 4 figures.

L 3600-66

ACCESSION NR: AP5024047

ASSOCIATION: none

SUBMITTED: 12Sep64 ENCL: 00 SUB CODE: NP, OP

NO REF SOV: 008 OTHER: 005

Card 3/3

BELETSKAYA, I.P.; KARPOV, V.I.; REUTOV, O.A.

Stereochemistry of the reaction of the cis-trans isomers of styryl mercury bromide with bromine. Izv.AN SSSR.Ser.khim. no.9:1707-1709 S '64. (MIRA 17:10)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

BELETSKAYA, I.P.; REUTOV, O.A.; KARPOV, V.I.

Electrophylic substitution reactions at the olefin carbon atom. Report No.1: Reaction of trans-β-chloroviny mercury chloride with iodine in the presence of iodine ion in aqueous dioxane. Izv.AN SSSR.Otd.khim.nauk no.11:1961-1965 N '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury organic compounds) (Substitution (Chemistry))

BELETSKAYA, I.P.; REUTOV, O.A.; KARPOV, V.I.

Electrophylic substitution reactions at olefin carbon atom. Report No.2: Reaction of trans- and cis-β-chlorovinylmercury chloride with iodine in the presence of cadmium iodide in absolute methanol. Izv. AN SSSR Otd.khim.nauk no.12:2125-2128 D '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury compounds) (Cadmium iodide) (Substitution (Chemistry))

BELETSKAYA, I.P.; REUTOV, O.A.; KARPOV, V.I.

Electrophylic substitution reactions at olefin carbon atom.
Report No.3: Reaction of trans- and cis-β-chlorovinylmercury chloride with iodine in the presence of cadmium iodide in dimethylformamide.
Izv. AN SSSR Otd.khim.nauk no.12:2129-2132 D '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury compounds) (Cadmium iodide) (Substitution (Chemistry))

KARPOV, V.I.

Solubility of trisubstituted uranyl phosphate. Zhur. neorg. khim. 6 no.3:531-533 Mr '61. (MIRA 14:3)
(Uranyl phosphate)

S/186/62/004/006/005/009
E075/E436

AUTHOR: Karpov, V.I.

TITLE: The investigation of complex formation between uranyl-ion and orthophosphoric acid

PERIODICAL: Radiokhimiya, v.4, no.6, 1962, 667-671

TEXT: The complex formation was investigated in relatively dilute solutions of H_3PO_4 using spectrophotometric and sorptional methods. The solutions contained 0.32 and 1.6 M HNO_3, 0.042 M uranium and H_3PO_4 corresponding to U:P ratio of 1:1 to 1:4. The spectra show that complex formation takes place in all the solutions. The plots of U:P ratio against the optical density of the solutions show maxima at the ratio of 1:1, which indicates the formation of $[UO_2H_nPO_4]^{2-(3-n)}$. Electrodialysis of the solutions with the U:P ratio of 1:1 shows that the predominant complexes are $[UO_2H_2PO_4]^+$ and $[UO_2H_3PO_4]^{2+}$. It was shown that $[UO_2PO_4]^-$ was sorbed by resin АН-2Ф (AN-2F) in the NO_3 form, the quantity of the sorbed U increasing with the concentration of H_3PO_4. The sorption of U on resin КУ-2 (KU-2) in the H - form decreases both with the acidity of the solutions and the increasing concentration

Card 1/2

S/186/62/004/006/005/009
E075/E436

The investigation of complex ...

of H_3PO_4. It is concluded that at low concentrations of H_3PO_4 complexes $[UO_2PO_4]^-$ and probably $[UO_2HPO_4]^0$ exist in equilibrium with $[UO_2H_2PO_4]^+$ and $[UO_2H_3PO_4]^{2+}$. There are 5 figures and 3 tables.

SUBMITTED: September 27, 1961

Card 2/2

KARPOV, V.I.; BAKHUROV, V.G.

Precipitation of uranyl phosphates. Zhur. neorg. khim. 7 no.8:1842-1845 Ag '62. (MIRA 16:6)

(Uranium phosphate)

KARPOV, V.I.; AMBARTSUMYAN, TS.L.

Some physiochemical properties of uranyl phosphates. Zhur. neorg. khim. 7 no.8:1838-1841 Ag '62. (MIRA 16:6)

(Uranium phosphate)

GALKIN, I.P.; VERYTIN, U.D.; KARPOV, V.I.

Some physicochemical properties of ammoniumuranyl pentafluoride. Zhur. neorg. khim. 7 no.8:2020-2022 Ag '62. (MIRA 16:6)

(Uranyl compounds)

S/089/62/012/006/015/019
B102/B104

AUTHORS: Galkin, N. P., Veryatin, U. D., Karpov, V. I., Braverman, I. B., Fedoseyev, I. V.

TITLE: Thermodynamics of the reduction of uranium oxides and uranyl fluoride by certain reducing agents

PERIODICAL: Atomnaya energiya, v. 12, no. 6, 1962, 531-533

TEXT: The reduction reactions of UO_2F_2 and higher uranium oxides were calculated, and the reducibility of several reducing agents was assessed. The reaction potentials were determined for the range 373-1173°K, using the relation $\Delta Z_T = -H_{298} - T\Delta S_{298} + \int_{298}^{T} \Delta c_p dT - \int_{298}^{T} \frac{\Delta c_p}{T} dT$.

The results are tabulated. UO_3 is reduced more easily than U_3O_8. ΔZ_T is greatest when NH_3 is used as reducing agent. The reducibility of CO decreases with temperature. UO_2F_2 cannot be reduced by CO, but is reduced

Card 1/2

Thermodynamics of the reduction ... S/089/62/012/006/015/019
B102/B104

by H_2 or NH_3. There are 2 figures and 2 tables.

SUBMITTED: September 11, 1961

Card 2/2

SAZONOVA, V.A.; KARPOV, V.I.

Tetra(1-indolyl) boron salts. Zhur.ob.khim. 33 no.10:3313-3315 O '63. (MIRA 16:11)

L 7016-66 EWT(m)/EWP(t)/EWP(k)/EWP(b) JD
ACC NR: AP5026828 SOURCE CODE: UR/0286/65/000/017/0115/0115

INVENTOR: Sergiyev, A. P.; Karpov, V. I.

ORG: none

TITLE: A working fluid for electroerosion machining. [Class 49, No. 174516 [announced by Enterprise of the State Committee for Defense Technology, SSSR (Predpriyatiye Gosudarstvennogo komiteta po oboronnoy tekhnike SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 115

TOPIC TAGS: electroerosion machining, cutting fluid

ABSTRACT: This Inventor's Certificate introduces a working fluid with a water base for electroerosion machining. The corrosion properties are reduced and the finish of the treated surface is improved by adding 4% calcined soda (Na_2CO_3) to the fluid.

SUB CODE: IE/ SUBM DATE: 23Sep63/ ORIG REF: 000/ OTH REF: 000

Card 1/1

UDC: 621.9.048.4

L 62908-65

ACCESSION NR: AP5019174 UR/0337/65/000/007/0065/0067
664.95

10

B

AUTHOR: Karpov, V. I. (Candidate of technical sciences)

TITLE: A setup for increasing the reliability of vibrating packers

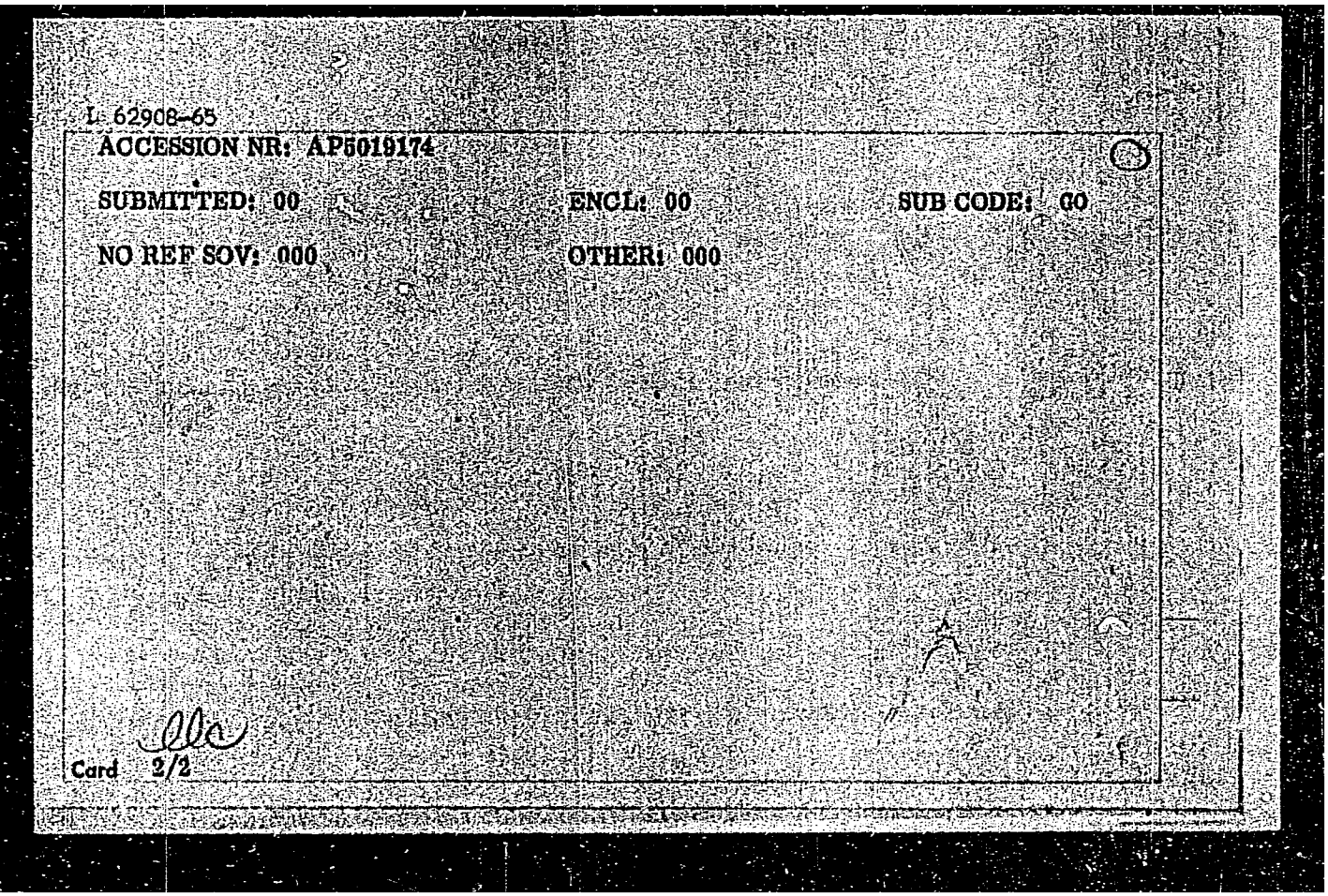
SOURCE: Rybnoye khozyaystvo, no. 7, 1965, 65-67

TOPIC TAGS: packer reliability, vibrating packer, fish packer

ABSTRACT: Analyzing the graphs representing the changes in the moments of inertia and the changes of compressive forces within the vibrating packers used in Soviet fishing industries, the author found that in the extreme positions of the mechanisms, at 335 oscillations per minute, the loads at the bearing reach 320-380 kg, and this high value could be the reason for frequent mechanical failures within the equipment. To remedy the situation he proposes and describes the mounting of springs which, in addition to the reduction of peak stresses, reduces also the associated large bearing frictions and improves the efficiency of the device. Orig. art. has: 9 formulas and 4 figures.

ASSOCIATION: Kaliningradskiy tekhnicheskiy institut rybnoy promyshlennosti i khozyaystva (Kaliningrad Technical Institute for Fishing and Fish Processing)

Card 1/2



L 62908-65
ACCESSION NR: AP5019174

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Card 2/2

AFANAS'YEV, A.M.; PAVLOV, S.A.; KAMNOV, V.I.; ZVEREV, B.I.

X-ray diffraction examination of polyamide films cast from irradiated solutions. Plast. massy no.4:52-55 '65.
(MIRA 18:6)

BELETSKAYA, I.P.; KARPOV, V.I.; MOSKALENKO, V.A.; REUTOV, O.A., akademik

Protolysis mechanism of cis- and trans-β-chlorovinyl mercury chlorides under the effect of HCl and DCl. Dokl. AN SSSR 162 no.1:86-89 My '65. (MIRA 18:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

KARPOV, V. K.

Ind Eng

(3)

Fuel Abstracts
Vol. XV, No.2
Feb. 1954
Natural Solid Fuel:
Winning

997. OPERATION OF UKMG-? CUTTER-LOADERS ON A SEAM 0.4? TO 0.53 M THICK IN TSENTRAL'NAYA ZAVODSKAYA MINE. Karpov, V.K., Osmanyan, K.A. and Yatskikh, V.G. (Ugol (Coal), Sept. 1953, ?–?6). The method of working and performance are given, with diagrams, charts and tables. (L).

AUTHOR: Karpov, V.K., Engineer SOV/118-58-1-12/16

TITLE: A Hydraulic Wash Out Arrangement for the Embedding of Cables and Pipe-Lines (Gidravlicheskoye razmyvnoye ustroystvo dlya zaglubleniya kabeley i truboprovodov)

PERIODICAL: Mekhanizatsiya trudoyëmkikh i tyazhëlykh rabot, 1958, Nr 1, p 40 (USSR)

ABSTRACT: This is a short description of how to embed cables and conduits on the bottom of rivers and lakes by washing out the soil with 800 cu m per hour capacity suction-pumps. There is 1 diagram.

1. Earth moving machines---Design 2. Pipelines---Construction
3. Construction---Equipment

Card 1/1

KARPOV, V.L.

Preparative isolation of C^{14}-amino acids by ion exchange and paper chromatography. Vest. LGU 18 no.9:108-114 '63. (MIRA 16:6)
(Amino acids) (Paper chromatography) (Ion exchange)

KARPOV, V.L.; SERGEYEV, N.M.; YURKEVICH, V.G.

Molecular mobilities in latexes. Study by the method of nuclear magnetic resonance. Dokl. AN SSSR 152 no.3:655-657 S '63. (MIRA 16:12)

1. Fiziko-khimicheskiy institut im. L.Ya.Karpova. Predstavleno akademikom V.A.Karginym.

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L 17560-65 EWG(j)/EWT(n)/EPF(c)/EPF(n)-2/EPR/EWP(j)/T/EWA(h)/EWA(1) Pc-4/
Pr-4/Ps-4/Peb/Pu-4 GG/RM

ACCESSION NR: AP4049784 S/0138/64/000/011/0028/0033

AUTHOR: Kaplunov, M. Ya.; Khozak, V. K.; Kozlov, V. T.; Sobolev, V. S.; Tarasova, Z. N.; Borisov, V. A.; Karpov, V. L.; Dogadkin, B. A.

TITLE: Thermoradiation vulcanization of tires

SOURCE: Kauchuk i rezina, no. 11, 1964, 28-33

TOPIC TAGS: thermoradiation vulcanization, rubber structure, sulfur vulcanization, tire wear, thermal aging

ABSTRACT: The effectiveness of the method of thermoradiation vulcanization was investigated from the point of view of increasing the quality of the tires. The radiation unit consisted of 18 spent, heat-liberating elements from an atomic reactor. The total activity amounted to 76,000 gram-equivalents of radium. Not more than six 5.60-15 tires could be treated at one time in a cylindrical vat with a hermetically closed cover. The tires had a reduced content of vulcanizing agent; one contained a sensitizer of radiation structuring-hexachlorethane. Irradiation was in an argon medium at 0.35 atm pressure. The temperature did not exceed 40C. Radiation doses amounted to 5, 9, 13, and 20 Mrad. The resulting vulcanizate had the optimum relationship of crosslinks of the type -C-C- and

Card 1/2

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ACCESSION NR: AP4049784

-C-S_x-C. The destructive processes as well as processes of oxidation and trans-isomerization were less than during sulfur and radiation vulcanization. The relative content of rubber in the "active" portion of the vulcanization network was high. The rubbers had much higher elasticity and strength, as well as increased resistance to thermal aging and wear. Accelerated road tests showed 15-20% greater wear resistance than standard tires. "The relationship between structurization and destruction was determined by A. S. Ly*kin. N. D. Stepanov, V. Ye. Lesnichiy and L. M. Dunayev (member of NIFKhI) took part in setting up the apparatus. The design of the apparatus was developed under the guidance of G. N. Lisov (member of NIFKhI). Measurements of radioactivity and dosimetry were carried out by A. G. Vasil'yev and V. Ye. Drozdova (member of NIFKhI). The TsZL MShZ took part in manufacturing the tires." Orig. art. has: 5 figures and 4 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promy*shlennosti (Scientific Research Institute for the Tire Industry); Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im. L. Ya. Karpova (Scientific Research Institute for Physics and Chemistry)

SUBMITTED: 00 ENCL: 00 SUB CODE: MT

NO REF SOV: 005 OTHER: 001

Card 2/2

KARPOV, V.L., FILIPPOV, B.V.

Effect of β-particles of C^{14} on Chlorella grown in a medium with C^{14} carbonates. Radiobiologiia 5 no.4:588-593 '65.
(MIRA 18:9)

1. Biologicheskiy institut Leningradskogo universiteta imeni A.A. Zhdanova.